INCH-POUND

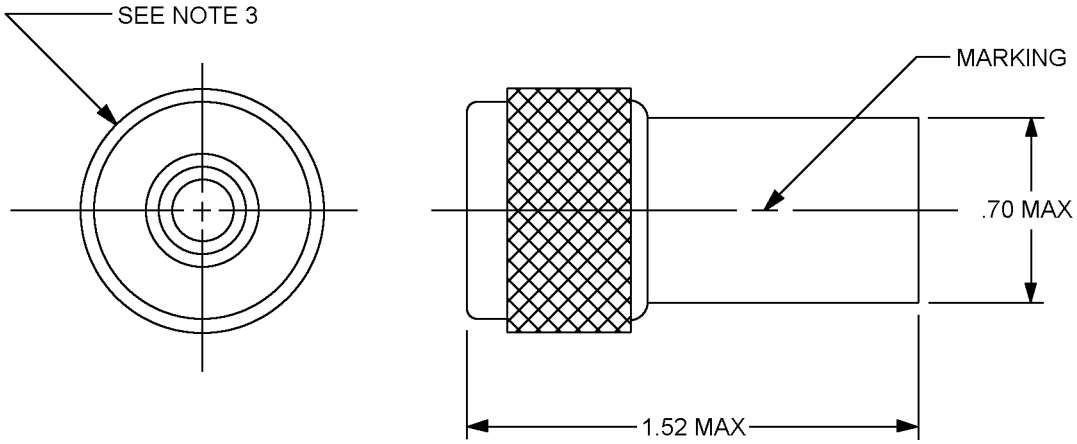
MIL-DTL-39030/5C
14 April 2003
SUPERSEDING
MIL-D-39030/5B
1 March 1994

DETAIL SPECIFICATION SHEET

DUMMY LOADS, ELECTRICAL, COAXIAL, TYPE IV (TNC), LOW POWER

This specification is approved for use by all Departments and Agencies of the Department of Defense.

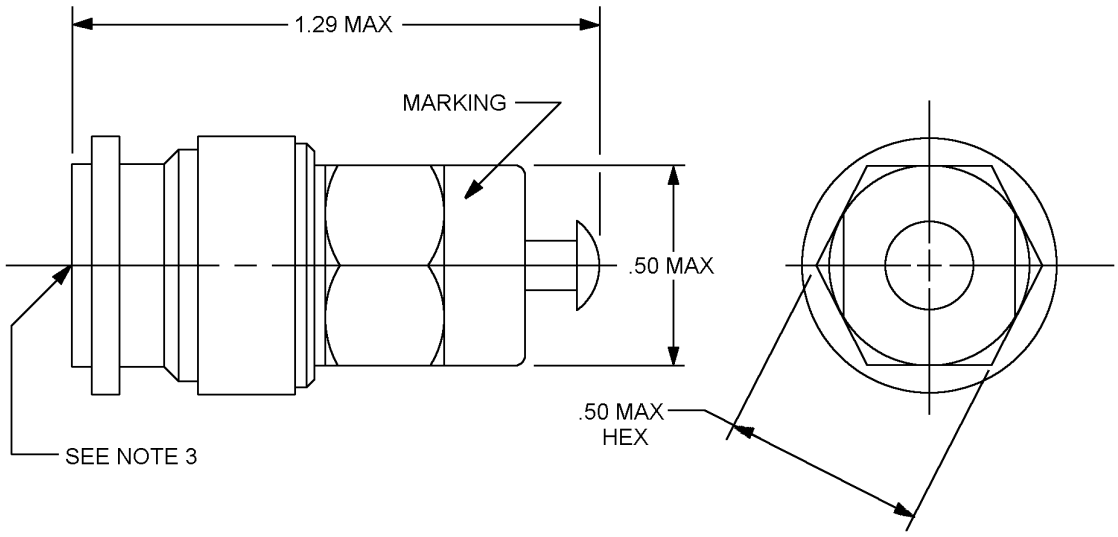
The requirements for acquiring the product described herein shall consist of this specification and MIL-DTL-39030.



Inches	mm
.70	17.8
1.52	38.7

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Series TNC pin contact interface in accordance with MIL-STD-348.
4. Part or Identifying Number (PIN).

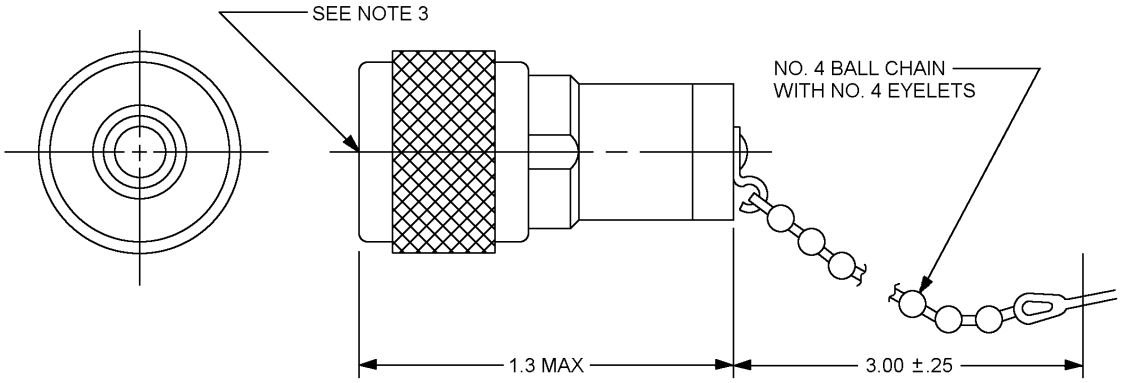
FIGURE 1. Dimensions and configuration, PINs M39030/5-01N and M39030/5-01S.



Inches	mm
.50	12.7
1.29	32.8

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Series TNC pin contact interface in accordance with MIL-STD-348.

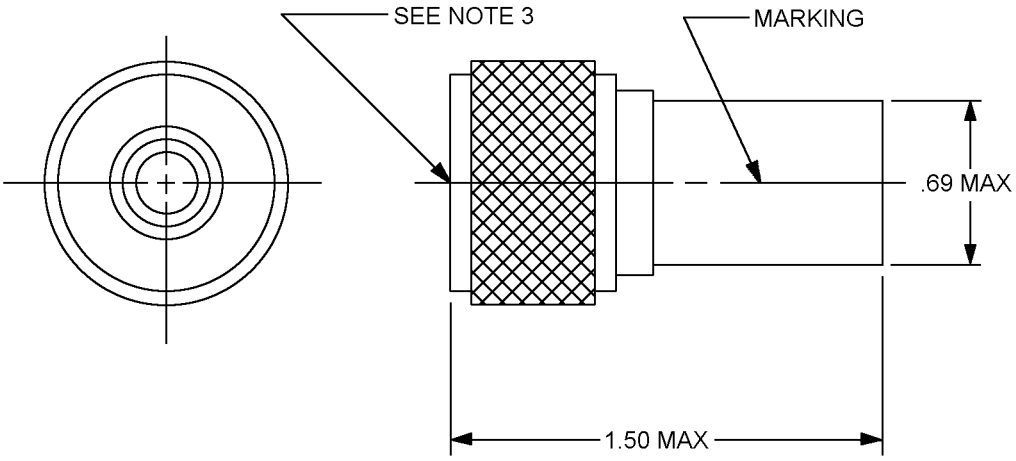
FIGURE 2. Dimensions and configuration, PINs M39030/5-02N and M39030/5-02S.



Inches	mm
.25	6.4
1.3	33.0
3.00	76.2

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Series TNC pin contact interface in accordance with MIL-STD-348.

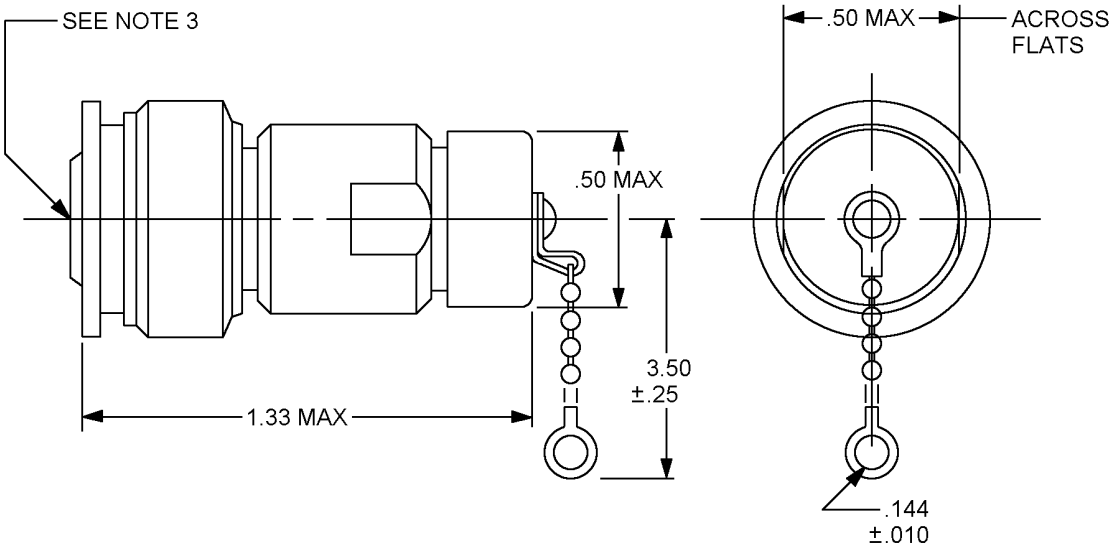
FIGURE 3. Dimensions and configuration, PINs M39030/5-03N and M39030/5-03S.



Inches	mm
.69	17.5
1.50	38.1

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Series TNC pin contact interface in accordance with MIL-STD-348.

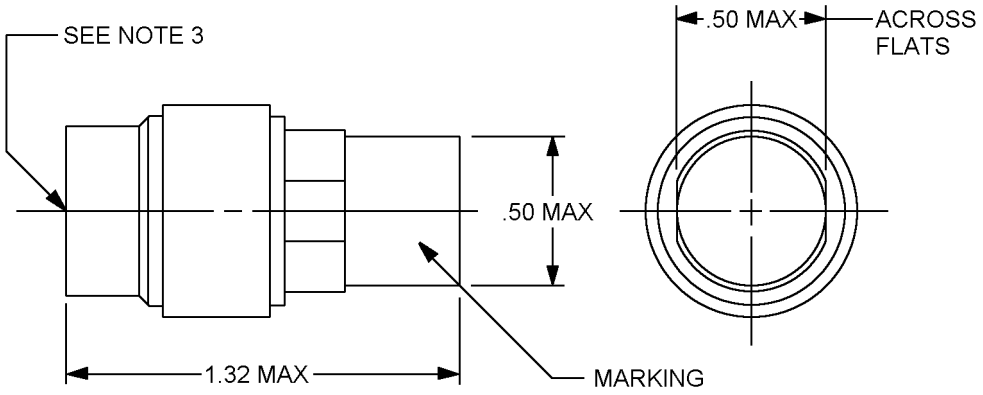
FIGURE 4. Dimensions and configuration, PINs M39030/5-04N and M39030/5-04S.



Inches	mm
.010	.25
.144	3.66
.25	6.35
.50	12.7
1.33	33.8
3.50	88.9

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Series TNC pin contact interface in accordance with MIL-STD-348.

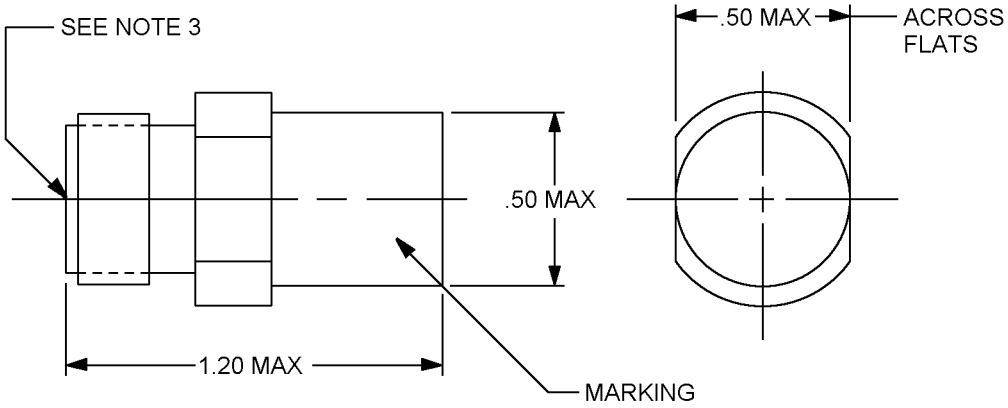
FIGURE 5. Dimensions and configuration, PINs M39030/5-05N and M39030/5-05S.



Inches	mm
.50	12.7
1.32	33.5

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Series TNC pin contact interface in accordance with MIL-STD-348.

FIGUER 6. Dimensions and configuration, PIN's M39030/5-06N and M39030/5-06S.



Inches	mm
.50	12.7
1.20	30.5

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Series TNC socket contact interface in accordance with MIL-STD-348.

FIGURE 7. Dimensions and configuration, PINs M39030/5-07N and M39030/5-07S.

TABLE I. Dash numbers and characteristics.

Dash number N and S	Operating frequency (GHz)	VSWR (max)	Power handling capability (max)		Nominal characteristics Impedance (ohms)	Weight (max) (oz)	Finish	Figure number
			Average (watts)	Peak (watts)				
01 1/	DC to 10.0	1.40:1	5.0 2/	6.0K	50	3.0	Gold plated in accordance with ASTM B488, type 3.grade C, class 1.27	1
02	.06 to .08	1.12:1	.5	.6K	75	1.3	Gold plated in accordance with ASTM B488, type 3.grade C, class 1.27	2
03	DC to 10.0	1.15:1	2.0	2.5K	50	1.3	Gold plated in accordance with ASTM B488, type 3.grade C, class 1.27	3
04	DC to 10.0	1.05:1 (DC to 2.4 GHz) 1.20:1 (2.4 to10.0 GHz)	5.0 2/	6.0K 2/	50	3.0	Gold plated in accordance with ASTM B488, type 3.grade C, class 1.27	4
05	DC to 11.0	1.10:1	3.0	1K	51	1.3	Passivated in accordance with ASTM-A967 or SAE-AMS-QQ-P-35	5
06	.03 to 12.4	1.15:1	1.0	1.2K	50	1.3	Nickel plated in accordance with SAE-AMS-QQ-N-290	6
07	.03 to 12.4	1.15:1	1.0	1.2K	50	1.3	Nickel plated in accordance with SAE-AMS-QQ-N-290	7

1/ This dash number shall be used for a replacement part only. For new design, dash number 04 shall be used.
2/ Power input is derated linearly from 100 percent at 25°C to 25 percent at specified maximum ambient operating temperature.

REQUIREMENTS:

Dimension and configurations: See figures 1 thru 7.

Electrical characteristics: See table I.

Materials:

Body and connector: Corrosion-resistant steel in accordance with SAE-AMS-QQ-S-763 or ASTM A484/A484M and ASTM A582.

Finish: See table I.

Contact pin and contact socket: Beryllium copper in accordance with ASTM B194, 196 or 197.

Finish: The male pin shall be plated to a minimum gold thickness of 50 micro inches (1.27μm) in accordance with ASTM B488, type 3, grade C, class 1.27, over 50 micro inches (1.27 μm) minimum of nickel in accordance with AMS-QQ-N-290, class 1, measured anywhere along the mating surface, for all series. The socket contact shall be plated to a minimum of 50 micro inches (1.27μm) of gold in accordance with ASTM B488, type 3, grade C, class 1.27, over 50 micro inches (1.27 μm) minimum of nickel in accordance with AMS-QQ-N-290, class 1, including the I.D., measured at a depth of .040 inch minimum. The plating on non-significant surfaces in the I.D. shall be of sufficient thickness to ensure plating continuity and uniform utility and protection. This plating may consist of an underplate only. A silver underplate shall not be permitted.

Bead chain and lug: Corrosion-resistant steel or plastic.

Weight: See table I.

Ambient temperature range:

Operating:

Dash numbers 01, 03, 06, and 07: -55°C to +125°C.
Dash number 02: -46°C to +71°C.
Dash number 04: -62°C to +71°C.
Dash number 05: -54°C to +125°C.

Nonoperating (storage):

Dash numbers 01, 03, 06, and 07: -65°C to +125°C.
Dash number 02: -57°C to +85°C.
Dash number 04: -62°C to +85°C.
Dash number 05: -54°C to +150°C.

Connector tests: The following tests shall be performed after visual and mechanical examination in qualification and group A inspections:

Threaded coupling torque: 2 inch-pounds, maximum.

Coupling tightening torque: 15 inch-pounds, minimum.

Barometric pressure: Method 105 of MIL-STD-202, test condition C.

PIN: M39030/5-(dash number from table I) N for unscreened.
M39030/5-(dash number from table I) S for screened.

Superseding PINs: M39030/5-X of previous revisions is superseded by M39030/5-XN.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Review activities:
Army - AV, MI
Navy - AS, OS, SH
Air Force - 19

Preparing activity:
DLA - CC

(Project 5985-1244-003)